

# EXHIBIT J

## REDACTED

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UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No. 1:19-cv-12551-FDS

**PLAINTIFF’S RESPONSE TO DEFEDANT’S THIRD SET OF INTERROGATORIES &  
SUPPLEMENTAL RESPONSES TO INTEROGATORY NOS. 15 AND 16**

Plaintiff, Singular Computing LLC (“Singular”), responds to Defendant, Google LLC (“Google”), third set of interrogatories as follows.

**GENERAL OBJECTIONS**

Singular objects to the Definitions and Instructions as prolix and confusing, and has ignored them in preparing this response.

Singular objects to the Interrogatories as:

- 1) overly broad and unduly burdensome;
- 2) seeking irrelevant information;
- 3) seeking information protected by the attorney-client privilege or the work-product doctrine;
- 4) seeking discovery the burden or expense of which outweighs the likely benefit; and
- 5) seeking the subject of expert testimony before the time, and other than in the manner, specified by order of this Court and the Federal Rules of Civil Procedure.

These General Objections are incorporated by reference, without restatement, into the specific responses below.

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**RESPONSES**

**INTERROGATORY NO. 15:**

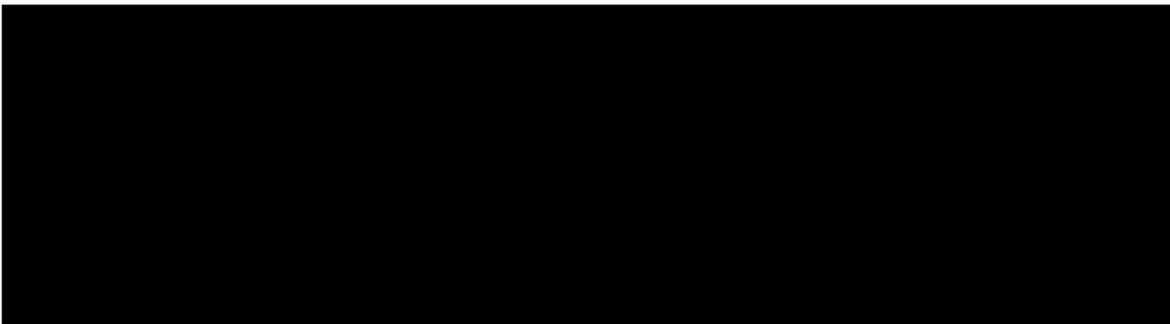
Describe all facts related to your contention that the S1 practices the Patents-in-Suit, including an element-by-element description of where and how each element of each asserted claim is met by the S1. To the extent there are differences in operation among performance of LNS arithmetic, floating point arithmetic, and/or integer arithmetic that affect how the S1 practices the claims of the Patents-in-Suit, identify those differences in the element-by-element mapping.

**RESPONSE:**

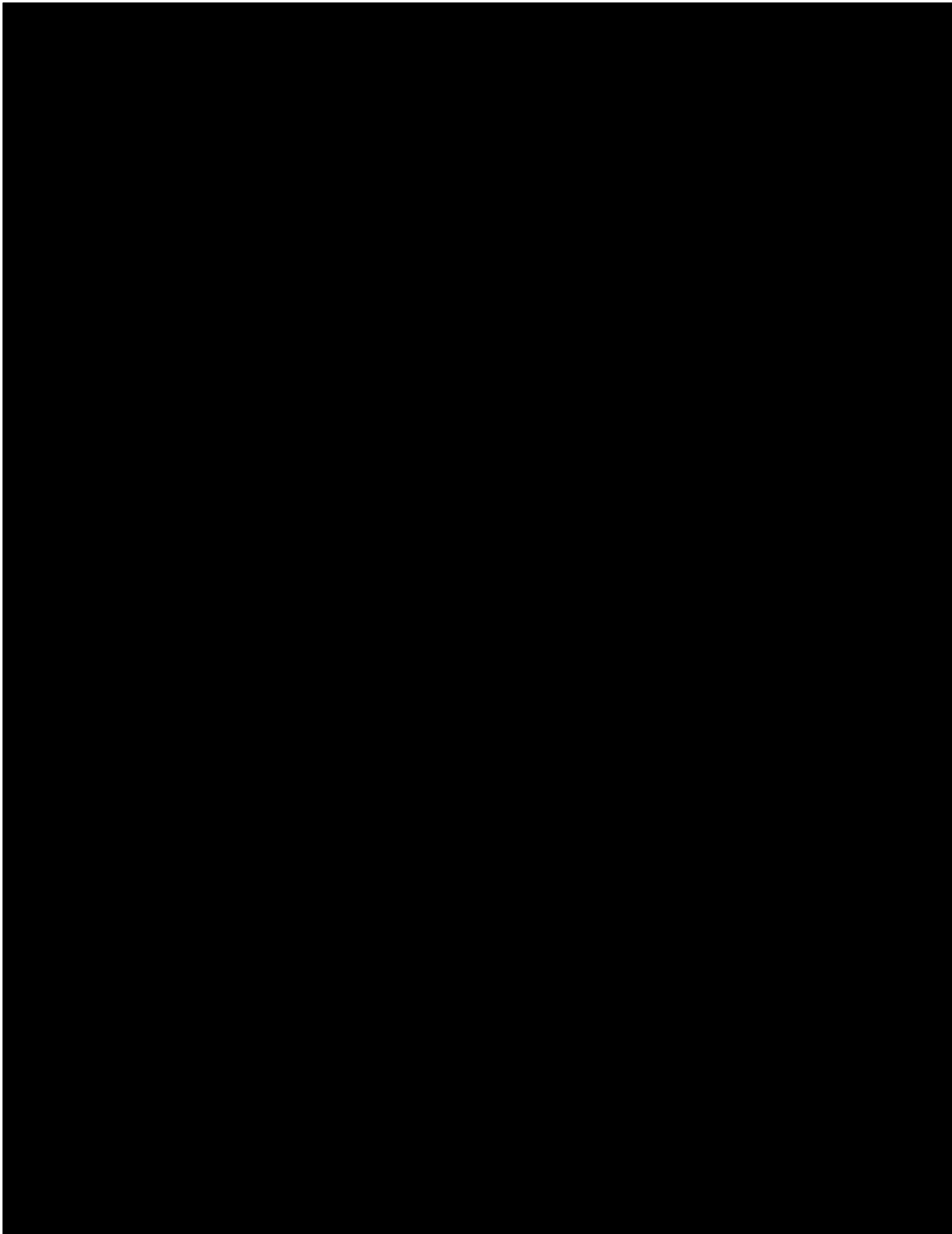
Singular reincorporates by reference its General Objections. Singular specifically objects to this Interrogatory because it is premature on the grounds that the Court has not construed the disputed claim terms. Singular further objects to this interrogatory on the grounds that it seeks irrelevant information. In addition, Singular objects to this Interrogatory to the extent that it seeks to discover information protected by the attorney-client privilege or the work-product doctrine. Singular further objects to this interrogatory on the grounds that it causes Google to exceed the number of interrogatories allowed under the Scheduling Order in this case; accordingly, Singular reserves the right to move to strike this interrogatory. Singular also objects to this interrogatory on the grounds that it calls for expert analysis and implicates expert discovery.

Subject to and without waiving its objections, Singular responds as follows:

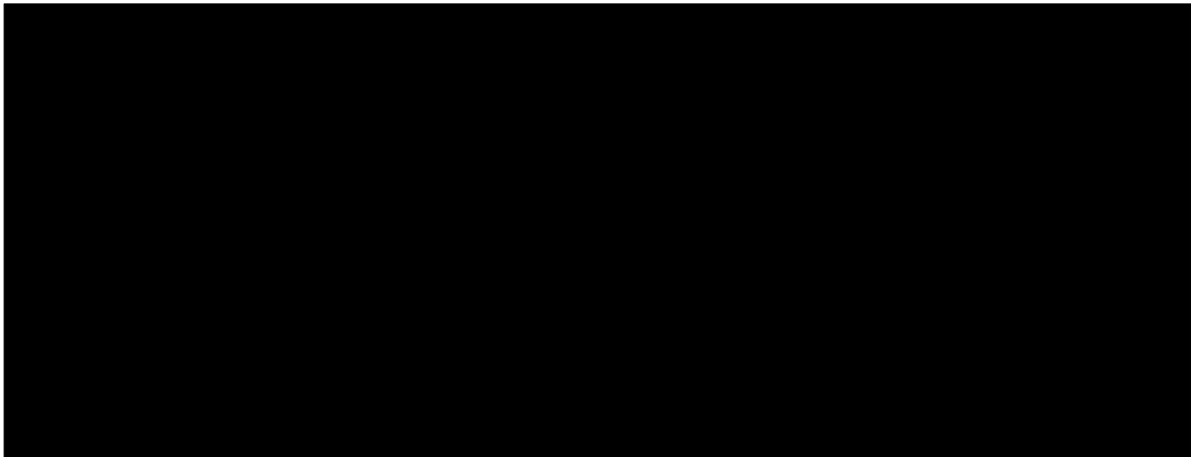
**[BEGIN HIGHLY CONFIDENTIAL – ATTORNEY’S EYES ONLY INFORMATION]**



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**CONTAINS HIGHLY CONFIDENTIAL – ATTORNEY’S EYES ONLY INFORMATION**



**[END HIGHLY CONFIDENTIAL – ATTORNEY’S EYES ONLY INFORMATION]**

For the reasons stated above with respect to the limitations of claim 7 of the ’156 patent, the S1 also meets all the limitations of the other asserted claims, including claim 53 of the ’273 patent and claims 4 and 13 of the ’961 patent. Plaintiff reserves the right to amend its response to this interrogatory as its investigation continues and as discovery progresses.

**SUPPLEMENTAL RESPONSE:**

Subject to and without waiving any of its General and specific Objections, Singular responds that it **developed test code to measure the accuracy of the square root (“sqrt”) operation**, as performed by the S1, for all possible valid inputs. Singular will make this test code available to Google for inspection subject to the requirements and restrictions set out in the Protective Order (Dkt. 87) regarding the production of material designated “**HIGHLY CONFIDENTIAL – SOURCE CODE.**”

Pursuant to Fed. R. Civ. P. 33(d), Singular refers Google to document bearing production number SINGULAR-00027686.

**INTERROGATORY NO. 16**

**Describe all facts and identify all documents related to Singular’s S2, including the reasons for the S2’s development, its technical specifications, your efforts to commercialize the S2, whether you contend the S2 practices the Patents-in-Suit, and, if so, where and how each element of each**

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asserted claim is met by the S2.

**RESPONSE:**

Singular reincorporates by reference its General Objections. Singular specifically objects to this Interrogatory to the extent that it seeks to discover information protected by the attorney-client privilege or the work-product doctrine. Singular also objects to this interrogatory on the grounds that it causes Google to exceed the number of interrogatories allowed under the Scheduling Order in this case. Singular further objects to this Interrogatory on the grounds that it seeks it seeks information that is neither relevant to the claims or defenses in this case nor likely to lead to the discovery of admissible evidence.

**SUPPLEMENTAL RESPONSE:**

Subject to and without waiving any of its General and Specific Objections, Singular responds that no S2 machine has ever been built.

**INTERROGATORY NO. 17**

**Describe all facts related to Dr. Bates’ awareness of Pavle Belanović, Miriam Leeser, and/or their publications, *see* SINGULAR-00002261, GOOG-SING-00020145, and identify the date(s) upon which Dr. Bates became aware of Belanović, Leeser, and/or their work.**

**RESPONSE:**

Singular reincorporates by reference its General Objections. Singular specifically objects to this Interrogatory on the grounds that it is vague and ambiguous. Singular also objects to this Interrogatory as seeking irrelevant information. Singular further objects to this Interrogatory on the grounds that it causes Google to exceed the number of interrogatories allowed under the Scheduling Order in this case; accordingly, Singular reserves the right to move to strike this interrogatory.

Subject to and without waiving its objections, Singular responds as follows: Dr. Bates knew Miriam Leeser socially in the early 1980s when she was an undergraduate but did not

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know **Pavle Belanović**. Dr. Bates became aware of the documents found in production numbers SINGULAR-00002261, GOOG-SING-00020145 in 2014.

**INTERROGATORY NO. 18**

**Describe the procedures you used to conduct the testing cited in Singular’s First Amended Complaint, ¶¶ 94, 111, 129, and the testing referenced in Singular’s infringement contentions, including, without limitation, when the testing was conducted, who conducted the testing, what source code was used for the testing, where the testing was conducted, what compiler command line was used to compile the source code, what hardware was used to run the tests, and what command-line arguments were used to run the executable code, as well as any other details necessary to allow one to reproduce the results Singular relies upon in its First Amended Complaint and infringement contentions.**

**RESPONSE:**

Singular reincorporates by reference its General Objections. Singular specifically objects to this Interrogatory on the grounds that it seeks irrelevant information. Singular also objects to this Interrogatory to the extent that it seeks to discover information protected by the attorney-client privilege or the work-product doctrine. Singular further objects to this interrogatory on the grounds that it causes Google to exceed the number of interrogatories allowed under the Scheduling Order in this case; accordingly, Singular reserves the right to move to strike this interrogatory.

**Further, based on representations made by Google’s attorney Anna Porto during a meet-and-confer conducted on Friday, April 2<sup>nd</sup> 2021, Singular understands that the intended scope of this interrogatory is limited specifically to the testing code that produced the output cited in Singular’s First Amended Complaint.**

Subject to and without waiving its objections, Singular responds as follows:

The testing **code that produced the output cited in Singular’s First Amended Complaint** has been produced as SINGULAR-00012094-00012100.

**The testing that produced the output cited in Singular’s First Amended Complaint was**

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conducted on or around late 2019.

The testing **that produced the output cited in Singular’s First Amended Complaint** was performed on a Macintosh computer.

The command line used to compile the testing code that produced the output cited in **Singular’s First Amended Complaint** is `gcc -o mult mult.c`.

The command line used to execute the testing code that produced the output cited in **Singular’s First Amended Complaint** is `./mult bf16 fp32`.



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Dated: May 12, 2021

Respectfully submitted,

/s/ Kevin Gannon

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ATTORNEYS FOR THE PLAINTIFF

CERTIFICATE OF SERVICE

I certify that on May 12, 2021, I served this document on Defendant by causing a copy to be sent via electronic mail to its counsel of record.

/s/ Kevin Gannon